



A Case of Emergent Hysterectomy Secondary To Avulsion of Subserosal Pedunculated Uterine Leiomyoma: How Barriers To Healthcare Impact Patient Outcomes

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Introduction

- Uterine leiomyomas, fibroids, are the most common benign uterine tumor; prevalence of up to 70-80% among women of reproductive age.
- May be an asymptomatic, incidental finding or symptomatic (abdominal pain, metrorrhagia, infertility, gastrointestinal and urinary tract disruption).
- Present as pedunculated or sessile subserosal, intramural or submucosal uterine masses.
- Estrogen and progesterone play a role in fibroid growth; the exact mechanism is unclear.
- Fibroids are associated with substantial morbidity in women of reproductive age and account for 1/3-1/2 of all hysterectomies.
- Despite high prevalence, much remains unknown about fibroid prevention and treatment and there is limited standardization in care plans.
- Consequently, fibroids are a significant source of reproductive healthcare disparity; particularly amongst black women and underserved communities.



Figure 1: CT, axial view



Figure 2: CT, cross sectional view

Case Presentation

A 50 year old Caribbean female presented to the island emergency department complaining of sudden onset, severe abdominal pain following a fall at the store. She reported lightheadedness, generalized weakness and non-radiating abdominal pain described as “aching, sharp and stabbing”. Family reports an episode of syncope prior to arrival. Her medications, allergies and past medical and family history are unknown.

Hospital Course

Physical Exam

- Diaphoretic, tachycardic, and in severe distress
- Alert and oriented to person, place, time and situation
- Pale mucous membranes
- Cold and clammy skin
- Abdomen distended, diffusely tender, bowel sounds present

Labs and Imaging

- Hb 9.1, MCV 82.9 and WBC 19
- Focused Assessment with Sonography for Trauma exam: intrauterine hemorrhage extending up to and around liver and spleen
- Abdominal CT with contrast: uterine enlargement (22x18x15 cm), likely uterine fibroid rupture as source of intra abdominal hemorrhage.

Management

- 2L bolus normal saline and 1 unit O negative pRBCs in ED
- Emergent exploratory laparotomy led to myomectomy, lysis of adhesions and total abdominal hysterectomy.
- Pathology: Myoma and uterus with normal adnexa and cervix
- Referred to gynecology for follow up



Figure 3: 22 x 18 x 15 cm fibroid mass and uterus (in tray) post complete hysterectomy and myomectomy

Discussion

Barriers to reproductive healthcare:

- Asymptomatic presentation and limited treatment options may reduce treatment-seeking behavior.
- Establishing universal best practices is challenging with diverse patient populations and varying access to quality care.
- Compounding effects of patient-related factors (socioeconomic status, healthcare education) and physician-related factors (training, experience and cultural awareness) impede equitable care.

Consequences to patient care:

- Patients delay care until advanced disease progression, symptoms impede activities of daily living, or as in this case, a traumatic event requires emergent medical attention.
- Increased morbidity and mortality.
- Underserved communities have increased rates of adverse health outcomes due to limited resources.
- When surgical intervention is indicated, there is a racial disparity in the surgical techniques used despite a lack of definitive standards of care.

Next steps:

- Targeted, community based reproductive healthcare education initiatives to increase awareness about signs, symptoms, and risk factors of common reproductive medical conditions.
 - School based reproductive health education programs
 - Reproductive health fairs and awareness walks
 - Global reproductive health community educator programs
- Accessible and affordable/free reproductive care in underserved areas
 - Weekend and evening clinical hours
 - Visiting specialist clinics
- Further equipping providers
 - Continued research to better understand fibroids and establish effective, evidence based standards of care
 - Training opportunities to learn new surgical techniques
 - Continuing Medical Education requirements focused on understanding and addressing reproductive healthcare disparities

Conclusion

- Various barriers to healthcare lead to conditions such as fibroids going untreated in many patients; further amplifying healthcare disparities which particularly plague black patients and underserved communities.
- Effective healthcare education and preventative reproductive medicine are important for improved patient outcomes.
- More effort is needed to tailor awareness and access to care at the community level.
- Further research is required to establish more definitive, evidence based standards of care for fibroids.
- More training opportunities in reproductive healthcare and education surrounding healthcare disparities will further equip physicians to best care for their patients.
- To equitably care for all patients, these efforts must be implemented both locally and globally.
- If these efforts are foregone, patients will continue to experience life threatening and life altering outcomes, as experienced by this patient.

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